

found no less than three genera of *asilidae* identical, and unknown elsewhere.

I regret never to have seen a specimen of *Rhaphiomidas* O. S., one of those peculiar transitional forms about which opinions will differ. Baron Osten Sacken has recently rejected it from the *midaidae*, and, judging from the description of the antennae, with good reason. These organs seem to be quite like those of the Dasygogonid *Ospriocerus*. In some features the form seems intermediate between

Apiocera and the *asilidae*, but the wing structure is so different from that of the latter family that I do not think it should be united with it. I would rather place it among the *apioceri-dae*. These and the many other osculant genera in the Orthorrhaphous diptera serve only to emphasize the fact that nature abhors classification, and the only good that can come from their discussion is the elucidation of the relative values of different structural characters.

DESCRIPTION OF ASPHONDYLIA HELIANTHI-GLOBULUS.

BY JOHN MARTEN, CHAMPAIGN, ILL.

This fly is recorded in Osten Sacken's Catalogue of N. A. Diptera, p. 5, as *A. helianthi-globulus*, Walsh (*in litt.*). Osten Sacken gives the following comparison. Trans. Am. Ent. Soc. Vol. III, p. 52.—“*A. rudbeckiae conspicua* at first sight is not unlike *A. helianthi-globulus*, Walsh *in litt.*, of which I owe a specimen to my lamented friend. Walsh's species, however, is easily distinguished by the paler color of its hind tibiae and tarsi. Its general color is also paler brown, with a yellowish-brown pubescence; its coxae are pale; the vein ending in the apex of the wing is less arched than in *A. rudbeckiae*.”

“*A. helianthi-globulus*, Walsh, forms a rounded swelling on the stem of *Helianthus*. As it has never been described these notes may serve to identify it.”

Imago, ♂ ♀, blackish brown, covered with grayish hairs (dry and alcoholic specimens become more brown); feet black with grayish hairs, femora brownish; hind tibiae, short first joint of the tarsi and the long second joint whitish tipped with black hairs. Wings clothed with dark grayish hairs, dusky; venation like that of *A. monacha*, O. Sack., it consists of three veins the last of which is forked, the anterior branch being partially concealed in a fold which extends to the root of the wing; the second vein is nearly straight and ends almost in the middle of the apex. The antennae are fourteen jointed (2 + 12), filiform and pubescent; the joints of the flagellum are cylindrical, of nearly equal gradually diminishing length up to the ninth; the tenth is smaller than the ninth; the eleventh and twelfth to-

gether are about equal in length to the tenth. Halteres light brown. The ovipositor is stout, cylindrical and furnished with a long needle-like organ which protrudes beyond the tip.

Length four mm. Emerges in September and October.

The pupa has two contiguous, short, subconical projections at the top of the head; the dorsal segments of the abdomen have on the middle of each a somewhat irregular double transverse row of short spines, and behind it a single regular row of similar spines, the last segment, at the tip, has a row

of such spines.

Osten Sacken compares, briefly, this pupa with *A. monacha*, Trans. Am. Ent. Soc. Vol. II, p. 301.

The galls are formed on the stem of *Helianthus grosse-serratus*, from a few inches to three feet or more above the ground; they are globular, spherical or ovate, in shape, from three-eighths of an inch to two inches in diameter.

The pupa in extricating itself from the gall may leave its case protruding from the place of exit or may drop to the ground before leaving its case.

SOME ACCOUNT OF OUR SPECIES OF GEOTRUPES.

BY FREDERICK BLANCHARD, LOWELL, MASS.

Several familiar species of *Geotrupes* are among the first acquisitions made by the beginner of a collection of coleoptera in the Eastern United States. They are in fact so abundant and easily found that the interest in them soon ceases, and this part of one's collection makes about the poorest exhibit of the whole, from the fact that the clumsily pinned, poorly cared for specimens of our early inexperience alone appear as representatives of the species. As I have recently observed, however, in Mr. Henry Ulke's collection, a series of good examples of the different species and their varieties is an ornament instead of, as is too often the case, a disgrace to the collection. It is not always best to neglect old friends, and in our

common species of *Geotrupes* the very interesting male peculiarities are quite worthy of occasional attention, as they form the basis of a natural classification.

In 1865 M. Henri Jekel published in the "Annales de la Société Entom. de France," an arrangement of the species of this genus, adopting the plan of making subgenera of the different divisions, paying especial attention to our North American species, and describing several from this country as new. A little later Dr. G. H. Horn, in 1867, in the Transactions of the Amer. Ent. Soc. vol. i, reviewed M. Jekel's paper at length as far as it related to our species, placing before American students the true relations and limits of the species at the same time very properly suppress-